



## FNA FREN MODÜLÜ FNA MODULER BRAKES FNA BREMS MODULE

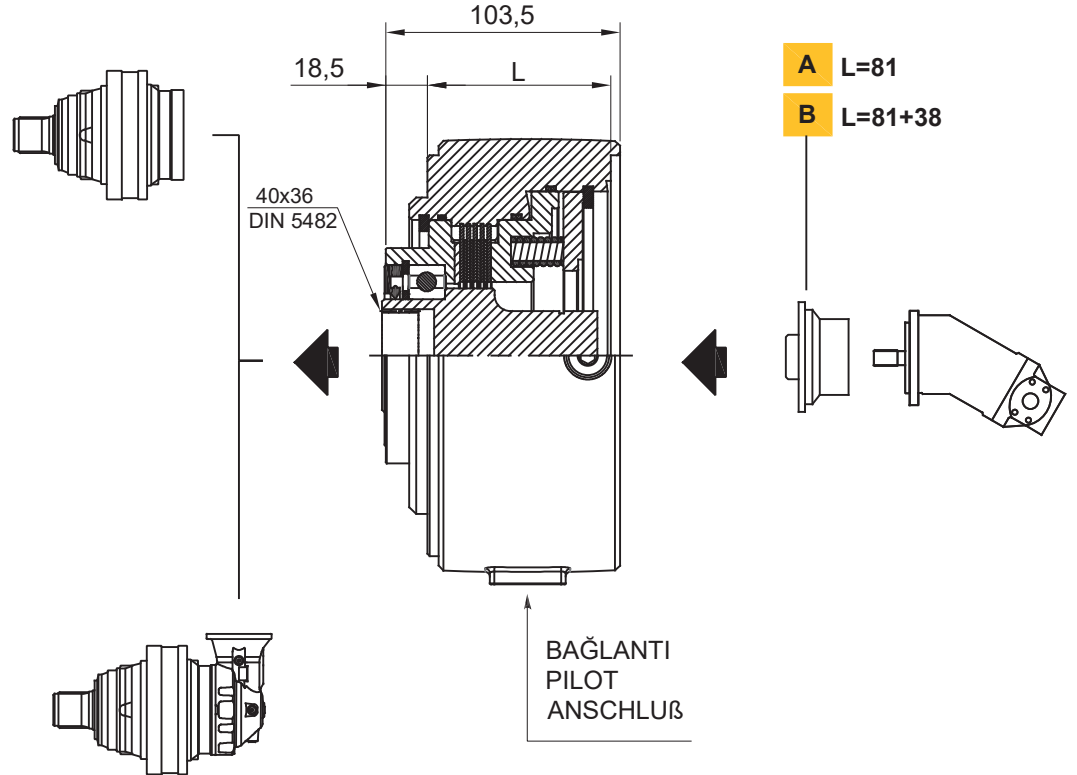
PDS Planet Redüktörleri hidrolik frenlerle ve yağ banyolu disklerle donatılmış olup frenleme için özel olarak dizayn edilmiştir. Frenleme için kullanılan yağlama, planet dişlileri için kullanılan yağlamadan bağımsızdır. Böylelikle yağ koyma sırasında dış yüzeyde bulunan girişten aynı zamanda frenleri de yağlayabilmek mümkündür. Yağ olarak ISO VG 32 kullanmanızı öneririz. (hidrolik yağ kullanmakta mümkündür)


PDS planetary reduction units are equipped with hydraulic brakes with oilbath disks, expressly designed for static or parking braking. The lubrication for the brakes is separated from the lubrication of the planetary gear units. Thus, during the lubricant inlet phase, it is necessary to pour the fluid also into the brake through the proper hole mounted on its casing. We suggest to use lubricant ISO VG 32 (however, hydraulic lubricants can be used as well).

Fuer die PDS - Planetengetriebe stehen hydraulische Federdruck-Lamellenbremsen zur Verfuegung. Diese sind ausschliesslich als statische Haltebremsen ausgelegt. Die Lamellen liegen im Oelbad, das vom Oelkreislauf des Getriebes getrennt ist. Deshalb ist beim Befuellen darauf zu achten, dass der Schmierstoff direkt in den Bremskoerper gegeben wird. In der Regel koennen Hydraulikoele verwendet werden. Empfohlener Schmierstoff: ISO VG 32.

	FNA
PD 101	1-2-3-4
PD 103	1-2-3-4
PD 105	1-2-3-4
PD 107	1-2-3-4
PD 109	2-3-4
PD 111	2-3-4
PD 113	2-3-4
PD 115	3-4
PD 117	3-4
PD 119	3-4
PD 121	3-4
PD 123	3-4
PD 125	4
PD 127	4
PD 129	4-5
PD 131	5
PD 133	5
PD 135	5
PD 137	5
PD 139	—
PD 141	—

	FNA
PDA 101	2-3-4
PDA 103	2-3-4
PDA 105	2-3-4
PDA 107	2-3-4
PDA 109	2-3-4
PDA 111	2-3-4
PDA 113	2-3-4
PDA 115	3-4
PDA 117	3-4
PDA 119	3-4
PDA 121	3-4
PDA 123	3-4
PDA 125	4
PDA 127	4
PDA 129	5
PDA 131	5
PD 133	5
PDA 135	5
PDA 137	—
PDA 139	—
PDA 141	—




FNA				
	C <sub>f</sub> <sub>min</sub> [Nm]	P <sub>a</sub> <sub>min</sub> [bar]	P <sub>max</sub> [bar]	Kg
FNA	550	34	320	14

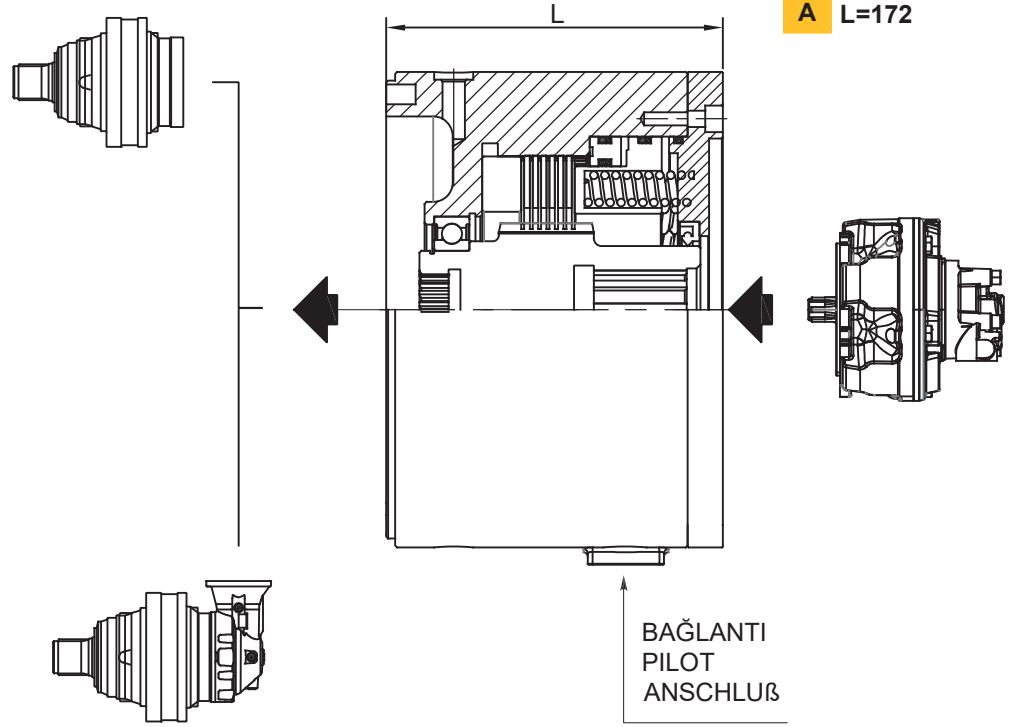
1-2-3-4-5 numaralı planet dişli redüktör kademelerine bakınız.


Numbers 1-2-3-4-5 refer to the number of stages of the planetary gear unit.


Die Ziffern 1-2-3-4-5 geben die Anzahl der Getriebestufen an.

**FNB FREN MODÜLÜ**  
**FNB MODULER BRAKES**  
**FNB BREMS MODULE**

	FNB
PD 101	—
PD 103	—
PD 105	1
PD 107	1
PD 109	1-2
PD 111	1-2
PD 113	1-2
PD 115	2-3
PD 117	2-3
PD 119	2-3
PD 121	2-3
PD 123	2-3
PD 125	3-4
PD 127	3-4
PD 129	3-4
PD 131	3-4
PD 133	3-4
PD 135	4-5
PD 137	4-5
PD 139	4-5
PD 141	4-5



	FNB
PDA 101	—
PDA 103	—
PDA 105	—
PDA 107	—
PDA 109	—
PDA 111	—
PDA 113	—
PDA 115	2
PDA 117	2
PDA 119	—
PDA 121	2-3
PDA 123	2
PDA 125	3
PDA 127	3
PDA 129	4
PDA 131	4
PDA 133	4
PDA 135	4
PDA 137	4-5
PDA 139	4-5
PDA 141	5

FNB				
	Cfs <sub>min</sub> [Nm]	Pa <sub>min</sub> [bar]	P <sub>max</sub> [bar]	Kg
FNB	1500	40	320	43

1-2-3-4-5 numaralı planet dişli redüktör kademelerine bakınız.

Numbers 1-2-3-4-5 refer to the number of stages of the planetary gear unit.



Die Ziffern 1-2-3-4-5 geben die Anzahl der Getriebestufen an.

# MGF FREN İLE DOĞRUDAN MOTOR GİRİŞ ADAPTÖR MGF DIRECT INPUT MOTOR ADAPTOR WITH BRAKE MGF MOTORFLANSCH MIT INTEGRIERTER BREMSE

Aşağıdaki tabloda PD planet redüktörleri üzerine doğrudan giriş MGF uygulamaları gösterilmiştir.

The table below shows direct input MGF applications on PD planetary gearboxes.

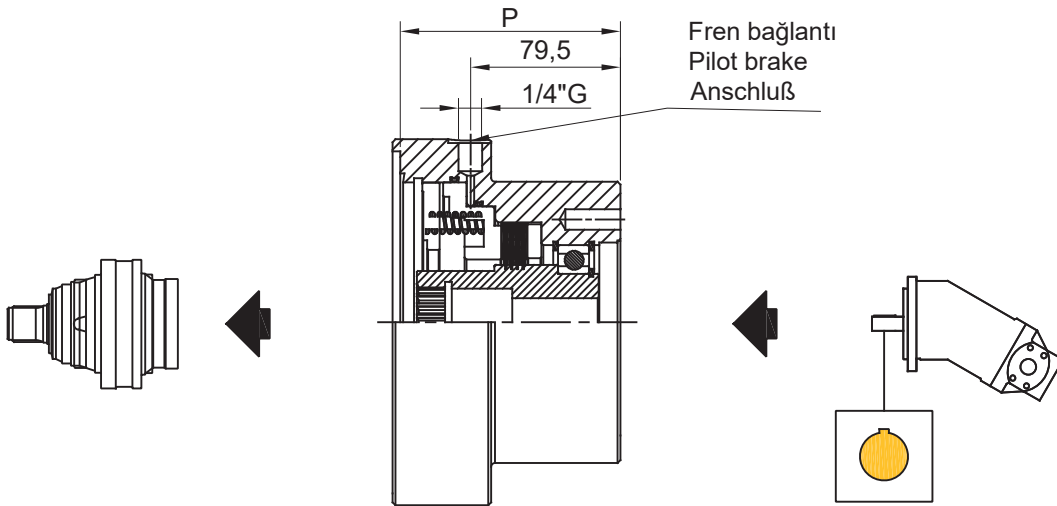
Die folgende Tabelle zeigt MGF-Anwendungen mit direkter Eingabe an PD-Planetengeräten.



	MGF		MGF
PD 101	1-2-3-4	PD 123	4
PD 103	1-2-3-4	PD 125	-
PD 105	2-3-4	PD 127	-
PD 107	2-3-4	PD 129	5
PD 109	3-4	PD 131	5
PD 111	3-4	PD 133	5
PD 113	3-4	PD 135	-
PD 115	4	PD 137	-
PD 117	4	PD 139	-
PD 119	4	PD 141	-
PD 121	4		

1-2-3-4-5 numaralı planet dişli redüktör kademelerine bakınız.

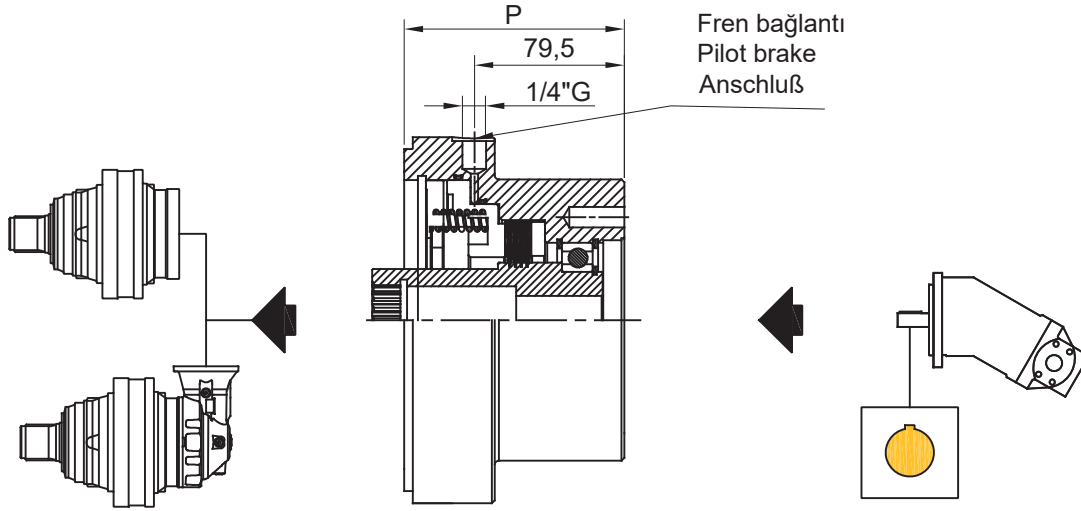
Numbers 1-2-3-4-5 refer to the number of stages of the planetary gear unit.



Die Ziffern 1-2-3-4-5 geben die Anzahl der Getriebestufen an.



	MGF				
	C <sub>fs</sub> <sub>min</sub> [Nm]	P <sub>a</sub> <sub>min</sub> [bar]	P	P <sub>max</sub> [bar]	Kg
MGF 55 SAE A 2-4 F D. 25 CH 8	600	25	114	320	14

**MF FREN İLE DOĞRUDAN MOTOR GİRİŞ ADAPTÖR**  
**MF DIRECT INPUT MOTOR ADAPTOR WITH BRAKE**  
**MF MOTORFLANSCH MIT INTEGRIERTER BREMSE**







MF						
		Cfs <sub>min</sub> [Nm]	Pa <sub>min</sub> [bar]	P	P <sub>max</sub> [bar]	Kg
		600	25	114	320	14
MF 55 SAE A 2-4 F D. 25 CH 8						



Aşağıdaki tabloda PD ve PDA planet redüktörleri üzerine doğrudan giriş MF uygulamaları gösterilmiştir.



The table below shows direct input MF applications on PD and PDS planetary gearboxes.

Die folgende Tabelle zeigt MF-Anwendungen mit direkter Eingabe für PD- und PDS-Planetengetriebe.

	 MF
PD 101	-
PD 103	-
PD 105	1
PD 107	1
PD 109	2
PD 111	2
PD 113	2
PD 115	-
PD 117	3
PD 119	3
PD 121	3

	 MF
PD 123	3
PD 125	4
PD 127	4
PD 129	4
PD 131	5
PD 133	5
PD 135	-
PD 137	-
PD 139	-
PD 141	-

	 MF
PDA 101	2-3-4
PDA 103	2-3-4
PDA 105	2-3-4
PDA 107	2-3-4
PDA 109	2-3-4
PDA 111	2-3-4
PDA 113	2-3-4
PDA 115	3-4
PDA 117	3-4
PDA 119	3-4
PDA 121	4

	 MF
PDA 123	4
PDA 125	4
PDA 127	4
PDA 129	5
PDA 131	5
PDA 133	5
PDA 135	5
PDA 137	-
PDA 139	-
PDA 141	-

1-2-3-4-5 numaralı planet dişli redüktör kademelerine bakınız.

Numbers 1-2-3-4-5 refer to the number of stages of the planetary gear unit.

Die Ziffern 1-2-3-4-5 geben die Anzahl der Getriebestufen an.